



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,120	11/08/2005	Alan J. Bilanin	2264-147US/P28,850-A-USA	4342
20#02	7590	09/30/2008		
FOX ROTHSCHILD LLP P O BOX 592 112 NASSAU STREET PRINCETON, NJ 08542-0592			EXAMINER POPOVIC'S, ROBERT J	
			ART UNIT	PAPER NUMBER
			1797	
			MAIL DATE	DELIVERY MODE
			09/30/2008 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/556,120

**Applicant(s)**

BILANIN ET AL.

**Examiner**

/Robert James Popovics/

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to Mr. Rosser's telephone call of September 19, 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)  
3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Telephonic Interview***

**Mr. Roy J. Rosser** contacted the examiner on September 19, 2008, asserting that all the claims were generic to the two identified species. The election of species requirement is withdrawn, subject to re-instatement, should the claims be amended in a manner that makes Mr. Rosser's assertion no longer true.

### ***Claim Rejections - 35 USC § 103***

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of **GREEN (US 5,688,402)** and/or **SCHWIND (4,446,099)** and **DIXON (US 5,810,559)**. The claims essentially differ from the systems of **GREEN** or **SCHWIND** by specifying the use of a "projectile shield."

**DIXON** discloses the use of a "safety shroud" in combination with "a reactor coolant pump to reduce the risk of damage to the pumps and other parts of the reactor" (column 1, lines 5-10). In view of this disclosure, it would have been obvious to one skilled in the art to employ a "safety shroud" in either of the systems of **GREEN** or **SCHWIND**, in order to reduce the risk of damage to the pumps and other parts of the reactor.

The specific shape of the lower surface of the projectile shield, absent a showing of criticality, or unexpected results specifically associated therewith, is seen to constitute a parameter that would have been routinely optimized by those skilled in the art. As such, the claimed shape is seen to constitute an obvious modification of the system of the references as combined above.

Any inquiry concerning this communication should be directed to /Robert James Popovics/ at telephone number (571) 272-1164.

/Robert James Popovics/  
Primary Examiner  
Art Unit 1797